

CLAIMS

What is claimed is:

1. A method for upgrading code of an appliance comprising:
receiving signals from an interface circuit;
performing input/output decoding on said signals received by said interface circuit;
loading an upgraded application program from a source external of said appliance
to a volatile memory device upon a reception of a rewriting command;
erasing an application ware stored in a nonvolatile memory device; and
writing the contents of said upgraded application program to said nonvolatile
memory device in accordance with said upgraded application program after erasing said
application ware stored in said nonvolatile memory device.
2. The method for upgrading code of an appliance of claim 1, further
comprising, determining said signals received by said interface circuit whether said
rewriting command has been received.
3. The method for upgrading code of an appliance of claim 1 wherein said
appliance is a DVD product.
4. The method for upgrading code of an appliance of claim 1, wherein said
interface circuit is an ATAPI interface circuit.

5. A method for upgrading code of an appliance comprising:
receiving signals from an interface circuit;
performing input/output decoding on said signals received by said interface circuit;
loading a first program stored in a first portion of a nonvolatile memory device to a volatile memory device upon reception of a restoring command;
executing said first program loaded in said volatile memory device; and
loading a valid second program into said volatile memory device;

wherein said valid second program is provided from a source external of said appliance.

6. The method for upgrading code of an appliance of claim 5, further comprising, determining said signals received by said interface circuit whether said restoring command has been received.

7. The method for upgrading code of an appliance of claim 6, wherein said first program comprises an interface circuit driver and a file system code.

8. The method for upgrading code of an appliance of claim 7, further comprising,
initializing said interface circuit by executing said interface circuit driver; and
executing said file system code.

9. The method for upgrading code of an appliance of claim 8, further comprising,
loading an upgraded second program from a source external of said appliance to said volatile memory device upon reception of rewriting command;
erasing said second program stored in said second portion of said nonvolatile memory device;

writing the contents of said upgraded second program to said second portion of said nonvolatile memory device in accordance with said upgraded second program after erasing said second program stored in said second portion.

10. The method for upgrading code of an appliance of claim 5, wherein said appliance is a DVD product.

11. The method for upgrading code of an appliance of claim 5, wherein said interface circuit is an ATAPI interface circuit.

12. A method for upgrading code of an appliance comprising,
receiving signals from a ATAPI circuit;

performing input/output decoding on said signals received by said ATAPI circuit to
determine whether a rewriting command has been received or a restoring command has
been received;

in the event of reception of said rewriting command , loading an upgraded second
program to a volatile memory device, erasing a second program stored in a second portion
of a nonvolatile memory device and writing the contents of said upgraded second program
to said second portion of said nonvolatile memory device in accordance with said upgraded
second program; and

in the event of reception of said restoring command , loading a first program stored
in a first portion of a nonvolatile memory device to a volatile memory device upon a
restoring application operation received, initializing interface circuit, executing file system,
reading a valid second program through said ATAPI circuit, loading said valid second
program into said volatile memory device;

wherein said valid second program is provided from an optical disk.

13. The method for upgrading code of an appliance of claim 14, further
comprising,

checking a validity of said second program provided from said source external of
said appliance; and

when an invalid second program is provided, waiting for said valid second
program.

14. The method for upgrading code of an appliance of claim 14, wherein said
nonvolatile memory device is a Flash memory device.